Journal of the Intensive Care Society
2016, Vol. 17(1) 90

DOI: 10.1177/1751143715601125
jics.sagepub.com

# An unmet need: Feeding for critically ill vegans

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We wish to highlight an area of concern, namely the lack of adequate enteral feeding preparations suitable for critically ill vegan patients. This letter has been prompted following a case in which a vegan patient was admitted to our intensive care unit. His relatives stated that he was a strict vegan and would not wish to be fed with products derived from animals or dairy produce. It is estimated that 0.3% of the UK population are vegan.[1]

Early enteral feeding has become routine practice in many intensive care units for critically ill patients. It has a beneficial effect on gut barrier function, increasing mucus secretion, bile, immunoglobulin, gastrointestinal-associated lymphoid tissue and entero-hormones functions. It also improves morbidity and confers a survival benefit.[2]

Compared to parenteral feeding, the enteral route is more physiological and has fewer infective complications[3,4]; therefore, parenteral feeding is usually reserved for those where enteral feeding is contraindicated or inadequate.

However, although there are commercially available enteral feeds that are suitable for those who require a halal or kosher diet, there are none available that are suitable for vegans. There is also no commercially available parenteral nutrition that can be used as a substitute either.[5]

The protein and/or fat and/or vitamin D components in all commercially available feeds are derived from animal products.

The nutritional requirement of a patient can be estimated as 25 kcal/kg/day.[6] Following assessment by the dietician, the only nutritional support we were able to provide this patient was enteral soya milk. Per 100 ml soya milk contains 40 kcal, 1.8 g fat, 2.8 g carbohydrate, 3.0 g proteins, vitamin D 0.75 mg, vitamin B2 0.21, vitamin B12 0.38 and calcium 120 mg.[7] Therefore, a 70 kg male who requires 1750 kcal/day would require 4375 ml of soya milk/day for their basic calorie requirement, which would be a massive fluid load and still not fulfil all of a patient's nutritional requirements.

We feel that enteral feeding for this population is an area of concern. There is currently inadequate provision and unmet need. We would welcome any suggestions on how a similar patient refusing standard enteral feeds could be managed in future.

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